

## CLAIMS

What is claimed is:

1. 1. An apparatus comprising:  
an input configured to accept a user identification comprising L bits; and  
an output configured to produce a code used for scrambling a high speed shared control channel (HS-SCCH); wherein the apparatus effectively processes at least the L bits of the user identification by a  $\frac{1}{2}$  rate convolutional code.
2. The apparatus of claim 1 further for effectively performing a  $\frac{1}{2}$  rate convolutional coding to produce the code used for scrambling the HS-SCCH.
3. A user equipment comprising:  
an input configured to accept a 16 bit user identification; and  
a device for processing the 16 bit user identification code with eight appended zero bits effectively using a  $\frac{1}{2}$  rate convolutional encoding to produce a 48 bit code for use in descrambling a high speed shared control channel (HS-SCCH).
4. The user equipment of claim 3 wherein the device further effectively performs rate matching to puncture eight bits after the production of the 48 bit code.
5. A user equipment comprising:  
an input configured to accept a 16 bit user identification; and  
means for processing the 16 bit user identification code with eight appended zero bits effectively using a  $\frac{1}{2}$  rate convolutional encoding to produce a 48 bit code for use in descrambling a high speed shared control channel (HS-SCCH).
6. The user equipment of claim 5 further comprising means for puncturing eight bits after the production of the 48 bit code.

7. A base station comprising:  
an input configured to accept a 16 bit user identification; and  
a device for processing the 16 bit user identification code with eight appended zero bits by effectively performing a  $\frac{1}{2}$  rate convolutional encoding to produce a 48 bit code for use in scrambling a high speed shared control channel (HS-SCCH) for a user equipment associated with the 16 bit user identification.

8. The base station of claim 7 wherein the device further effectively performing rate matching to puncture eight bits after the production of the 48 bit code.

9. A base station comprising:  
an input configured to accept a 16 bit user identification; and  
means for processing the 16 bit user identification code with eight appended zero bits by effectively performing a  $\frac{1}{2}$  rate convolutional encoding to produce a 48 bit code for use in scrambling a high speed shared control channel (HS-SCCH) for a user equipment associated with the 16 bit user identification.

10. The base station of claim 9 further comprising means for effectively puncturing eight bits after the production of the 48 bit code.